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71	Applicant: Holz & Co. GmbH 66740 Saarlois, Germany	
74	Agent: Dr. W. Bernhardt & Dr. R. Bernhardt 66123 Saarbrücken	

54 Sealant Product

57 Sealant Product for treating surfaces, especially painted and plastic surfaces wherein the product contains at least a siloxane or a silane.

¹ Registered Utility Model: The German "Gebrauchsmuster" is a smaller form of a patent.

DR. W. BERNHARDT
DR. R. BERNHARDT (Physics)
PATENT ATTORNEYS

KOBENHÜTTENWEG 43
D-66123 SAARBRÜCKEN
TELEPHONE: 0681-65000
FAX: 0681-65066

Description:

Holz & Co. GmbH, 66740 Saarlois

Sealant Product

The invention pertains to a sealant product for treating surfaces, especially paint and plastic surfaces.

The product is mainly used for automobile care. It is suitable for preserving paint and plastic surfaces in the interior and exterior of automobiles.

The invention has the objective create a new sealant product to be used in automobile care that has improved care characteristics over similar conventional products.

The sealant product pertaining to this invention that solves this objective contains at least one siloxane and/or silane as its protective ingredient.

It has been shown that such a sealant product based on a siloxane or silane, forms a shiny, long-lasting protective layer on the desired surface that is extremely resistant to water and dirt. Any dirt that still does adhere to the surface can be easily washed off; the simplest wash cycle at the car wash is sufficient. This environmentally friendly sealant product can be easily applied and is available, for example, as a ready-to-apply emulsion. The product is applied/distributed on the surface to be protected. A light polish is sufficient to create a gloss.

The siloxane components are especially suitable for the product's long-term shelf life. Polydimethylsiloxane resins are preferably used, especially in combination with alkyl alkoxy silane.

The invention preferably contains siloxane and or silane emulsions, whereby such emulsions should be thinned accordingly with distilled or demineralized water when used in their concentrated raw material form. Emulsions thinned such as this can be easily applied to surfaces that need protection.

In one of its applications where the sealant product is a cream, it contains an emulsifier² that is preferably made of sodium sulfo-succinic acid diisooctylester³. Such an emulsifier allows the polydimethyl siloxane to be mixed with water.

² emulsifier: the German word "Emulgator" also translates to "emulsifying agent"

³ sodium sulfo-succinic acid diisooctylester: original German is
"Natriumsulfobernsteinsäurediisooctylester"

In its application as a cream, the product furthermore contains a thickener that has a silicon dioxide component.

The invention is further described via application examples.

Application Example 1

To manufacture the sealant product in the form of an emulsion, distilled or demineralized water is mixed with an emulsion of polydimethyl siloxane resin as well as an alkyl alkoxy silane and an emulsion containing siloxane.

The mixture can be applied as a thin emulsion on the cleaned paint surface of an automobile body and spread with a rag. After it dries a high gloss protective film is formed without fully polishing. Residual amounts can be removed with light polishing as needed. The protective film is lasting and durable against weather and environmental influences and strongly repels both water and dirt. Dirt that does adhere to the surface can be washed off to maintain the shine. In addition to painted surfaces the product can also be used to treat chrome parts, plastic parts, wheel rims, rubber moldings or other exterior parts of an automobile.

Application Example 2

To manufacture a sealant product in a cream form, polydimethyl siloxane, an emulsifier containing sodium sulfo-succinic acid diisooctylester, a silane, dichlorodimethylsilane and a thickening agent containing silicon dioxide are added to distilled water and well mixed.

A cream is obtained that can be applied to cleaned plastic surfaces in an automobile interior, which is easily distributed on the surfaces and forms a high gloss protective film after drying that protects the plastic surface against environmental influences over time. The cream is suitable for door moldings, dashboards, door surfaces, storage trays, visors, etc.

Claims:

1. Sealant product for treating surfaces, especially paint and plastic surfaces, wherein the product contains at least one siloxane and/or silane.
2. Sealant product of Claim 1, wherein the product contains at least one polydimethyl siloxane and/or alkyl alkoxy silane.
3. Sealant product of Claim 1 or Claim 2, wherein the product contains siloxane and/or silane emulsions.
4. Sealant product of either Claims 1 to 3, wherein the product contains an emulsifier.
5. Sealant product of Claim 4, wherein the emulsifier contains sodium sulfo-succinic acid diisooctyl ester.
6. Sealant product of either Claims 1 to 5, wherein the product contains a thickening agent.
7. Sealant product of Claim 6, wherein the thickening agent contains reaction products with silicon dioxide.
8. Sealant product of either Claim 6 or 7, wherein the thickening agent contains at least one silane.

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